RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

| Application Serial Number: | 10/594 | //8 |
|----------------------------|--------|-------|
| Source: | | 1.FWP |
| Date Processed by STIC: | 10/11/ | 06 |

ENTERED

CRF Errors Edited by the STIC Systems Branch

| Serial N | Number: 10/594, 1/8 | CRF Edit Date: /9/1/06 Edited by: |
|----------|---|-----------------------------------|
| | Realigned nucleic acid/amino acid numbers/text text "wrapped" to the next line | in cases where the sequence |
| | Corrected the SEQ ID NO. Sequence numbers | edited were: |
| _ | | |
| | Inserted or corrected a nucleic number at the en NO's edited: | d of a nucleic line. SEQ ID |
| | Deleted: invalid beginning/end-of-file text; | page numbers |
|] | Inserted mandatory headings/numeric identifier | s, specifically: |
|] | Moved responses to same line as heading/numer | ric identifier, specifically: |
| | Other: | · |
| - | | |

Revised 09/09/2003



IFWP

DATE: 10/11/2006 RAW SEQUENCE LISTING TIME: 15:22:10 PATENT APPLICATION: US/10/594,118 Input Set : A:\PTO.AMC.txt Output Set: N:\CRF4\10112006\J594118.raw 2 <110> APPLICANT: Golz, Stefan Bruggemeier, Ulf Geerts, Andrease 6 <120> TITLE OF INVENTION: Diagnostics and Therapeutics for Diseases Associated with Peroxisome Proliferator Activated Receptor Delta (PPARD) W--> 8 <130> FILE REFERENCE: 004974.01218 C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/594,118 C--> 10 <141> CURRENT FILING DATE: 2006-09-25 10 <150> PRIOR APPLICATION NUMBER: PCT/EP2005/002529 11 <151> PRIOR FILING DATE: 2005-03-10 13 <150> PRIOR APPLICATION NUMBER: EP 04007020.3 14 <151> PRIOR FILING DATE: 2004-03-24 16 <160> NUMBER OF SEQ ID NOS: 5 17 <170> SOFTWARE: PatentIn version 3.2 W--> 18 <210> SEQ ID NO: 1 19 <211> LENGTH: 3301 20 <212> TYPE: DNA 21 <213> ORGANISM: Homo sapiens W--> 22 <220> FEATURE: 23 <221> NAME/KEY: misc feature 24 <222> LOCATION: (2966)..(2972) 25 <223> OTHER INFORMATION: n is a, c, g, or t W--> 26 <400> SEQUENCE: 1 27 gaattetgeg gageetgegg gaeggeggeg ggttggeeeg taggeageeg ggaeagtgtt 60 120 28 gtacagtgtt ttgggcatgc acgtgatact cacacagtgg cttctgctca ccaacagatg 29 aagacagatg caccaacgag ggtctggaat ggtctggagt ggtctggaaa gcagggtcag 180 240 30 atacccctgg aaaactgaag cccgtggagc aatgatctct acaggactgc ttcaaggctg 300 31 atgggaacca ccctgtagag gtccatctgc gttcagaccc agacgatgcc agagctatga 360 32 ctgggcctgc aggtgtggcg ccgaggggag atcagccatg gagcagccac aggaggaagc 420 33 ccctgaggtc cgggaagagg aggagaaaga ggaagtggca gaggcagaag gagccccaga 34 gctcaatggg ggaccacagc atgcacttcc ttccagcagc tacacagacc tctcccggag 480 35 ctcctcgcca ccctcactgc tggaccaact gcagatgggc tgtgacgggg cctcatgcgg 540 36 cagcctcaac atggagtgcc gggtgtgcgg ggacaaggca tcgggcttcc actacggtgt 600 660 37 tcatgcatgt gaggggtgca agggcttctt ccgtcgtacg atccgcatga agctggagta 720 38 cgagaagtgt gagcgcagct gcaagattca gaagaagaac cgcaacaagt gccagtactg

39 ccgcttccag aagtgcctgg cactgggcat gtcacacaac gctatccgtt ttggtcggat

40 gccggaggct gagaagagga agctggtggc agggctgact gcaaacgagg ggagccagta

41 caacccacag gtggccgacc tgaaggcctt ctccaagcac atctacaatg cctacctgaa

42 aaacttcaac atgaccaaaa agaaggcccg cagcatcctc accggcaaag ccagccacac

43 ggcgcccttt gtgatccacg acatcgagac attgtggcag gcagagaagg ggctggtgtg

44 gaagcagttg gtgaatggcc tgcctcccta caaggagatc agcgtgcacg tcttctaccg

45 ctgccagtgc accacagtgg agaccgtgcg ggagctcact gagttcgcca agagcatccc

46 cagcttcagc agcctcttcc tcaacgacca ggttaccctt ctcaagtatg gcgtgcacga

780

840

900

960

1020

1080

1140

1200

3

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/594,118

DATE: 10/11/2006

TIME: 15:22:10

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\10112006\J594118.raw

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     48 cagtggcttt gtcacccgtg agttcctgcg cagcctccgc aaacccttca gtgatatcat
                                                                             1380
     49 tgagcctaag tttgaatttg ctgtcaagtt caacgccctg gaacttgatg acagtgacct
                                                                             1440
     50 ggccctattc attgcggcca tcattctgtg tggagaccgg ccaggcctca tgaacgttcc
                                                                             1500
     51 acgggtggag gctatccagg acaccatcct gcgtgccctc gaattccacc tgcaggccaa
                                                                             1560
     52 ccaccctgat gcccagtacc tcttccccaa gctgctgcag aagatggctg acctgcggca
                                                                             1620
     53 actggtcacc gagcacgccc agatgatgca gcggatcaag aagaccgaaa ccgagacctc
                                                                             1680
     54 gctgcaccct ctgctccagg agatctacaa ggacatgtac taacggcggc acccaggcct
                                                                             1740
     55 ccctgcagac tccaatgggg ccagcactgg aggggcccac ccacatgact tttccattga
                                                                             1800
     56 ccagctctct tcctgtcttt gttgtctccc tctttctcag ttcctctttc ttttctaatt
                                                                             1860
     57 cetgttgete tgtttettee tttetgtagg tttetetet ecettetee ttetecettg
                                                                             1920
     58 ccctcccttt ctctccta tccccacgtc tgtcctcctt tcttattctg tgagatgttt
                                                                             1980
     59 tgtattattt caccagcagc atagaacagg acctctgctt ttgcacacct tttccccagg
                                                                             2040
     60 agcagaagag agtgggcctg ccctctgccc catcattgca cctgcaggct taggtcctca
                                                                             2100
     61 cttctgtctc ctgtcttcag agcaaaagac ttgagccatc caaagaaaca ctaagctctc
                                                                             2160
     62 tgggcctggg ttccagggaa ggctaagcat ggcctggact gactgcagcc ccctatagtc
                                                                             2220
     63 atggggtccc tgctgcaaag gacagtggca gaccccggca gtagagccga gatgcctccc
                                                                             2280
     64 caagactgtc attgcccctc cgatcgtgag gccacccact gacccaatga tcctctccag
                                                                             2340
     65 cagcacacct cagccccact gacacccagt gtccttccat cttcacactg gtttgccagg
                                                                             2400
     66 ccaatgttgc tgatggcccc tccagcacac acacataagc actgaaatca ctttacctgc
                                                                             2460
     67 aggcaccatg cacctccctt ccctccctga ggcaggtgag aacccagaga gaggggcctg
                                                                             2520
     68 caggtgagca ggcagggctg ggccaggtct ccgggggaggc aggggtcctg caggtcctgg
                                                                             2580
     69 tgggtcagcc cagcacctcg cccagtggga gcttcccggg ataaactgag cctgttcatt
                                                                             2640
     70 ctgatgtcca tttgtcccaa tagctctact gccctcccct tcccctttac tcagcccagc
                                                                             2700
     71 tggccaccta gaagtctccc tgcacagcct ctagtgtccg gggaccttgt gggaccagtc
                                                                             2760
     72 ccacaccgct ggtccctgcc ctcccctgct cccaggttga ggtgcgctca cctcagagca
                                                                             2820
     73 gggccaaagc acagctgggc atgccatgtc tgagcggcgc agagccctcc aggcctgcag
                                                                             2880
     74 gggcaagggg ctggctggag tctcagagca cagaggtagg agaactgggg ttcaagccca
     75 ggcttcctgg gtcctgcctg gtcctccctc ccaaggagcc attctatgtg actctgggtg
                                                                             2940
W--> 76 gaagtgccca gccctgcct gacggnnnnn nngatcactc tctgctggca ggattcttcc
                                                                             3000
     77 cgctccccac ctacccagct gatgggggtt ggggtgcttc tttcagccaa ggctatgaag
                                                                             3060
     78 ggacagetge tgggacecae etececeett eeeeggeeae atgeegegte eetgeeeeea
                                                                             3120
                                                                             3180
     79 cccgggtctg gtgctgagga tacagctctt ctcagtgtct gaacaatctc caaaattgaa
     80 atgtatattt ttgctaggag ccccagcttc ctgtgttttt aatataaata gtgtacacag
                                                                             3240
     81 actgacgaaa ctttaaataa atgggaatta aatatttaaa aaaaaaagcg gccgcgaatt
                                                                             3300
     82 c
                                                                             3301
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     84 <211> LENGTH: 441
     85 <212> TYPE: PRT
     86 <213> ORGANISM: Homo sapiens
W--> 87 <400> SEQUENCE: 2
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     89 1
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                                             10
     90 Lys Glu Glu Val Ala Glu Ala Glu Gly Ala Pro Glu Leu Asn Gly Gly
     91
                    20
     92 Pro Gln His Ala Leu Pro Ser Ser Ser Tyr Thr Asp Leu Ser Arg Ser
     93
                35
                                                         45
                                    40
     94 Ser Ser Pro Pro Ser Leu Leu Asp Gln Leu Gln Met Gly Cys Asp Gly
     95
                                55
                                                     60
            50
```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/594,118

DATE: 10/11/2006

TIME: 15:22:10

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\10112006\J594118.raw

| 96 <i>1</i> | | Ser | Cys (| Gly | Ser | Leu 70 | Asn | Met | Glu | Cys | Arg 75 | Val | Cys | Gly | Asp | Lys 80 |
|-------------|------------|--------|------------|------------|------------|-----------|------------|------------|------------|--------------|---------------------|-------------|---|--------------|-----------|------------|
| | | Ser | Gly : | | His 85 | _ | Gly | Val | His | Ala 90 | _ | Glu | Gly | Cys | Lys 95 | |
| | Phe | Phe | Arg | Arg | | Ile | Arg | Met | Lys 105 | | ı Glu | Tyr | Gli | ı Lys 110 | | Glu |
| 102 | Arg | Ser | _ | | | Gln | Lys | | s Asr | | Asn | Lys | | Glr | | Cys |
| 103 104 | Arg | Phe | 115 Gln | Lys | Cys | Leu | Ala | 120 Leu | | Met | . Ser | His | 125 Asr | | a Ile | Arg |
| 105 | -1 | 130 | | | 5 | | 135 | | | | | 140 | _ | | . (1) | |
| | Pne 145 | GIY | Arg | Met | Pro | 150 | | i GII | т гу | s Arg | ј Lys 155 | | ı val | L Ala | a GIY | Leu 160 |
| | | Ala | Asn | Glu | Glv | | | ı Tvı | . Asr | ı Pro | | | l Ala | a Ast | . Leu | Lys |
| 109 | | | | | 165 | | , <u> </u> | 2 - | | 170 | | - , | | | 175 | |
| 110 | Ala | Phe | Ser | Lys | His | Ile | . Tyr | Asr | n Ala | a Tyr | Lev | Lys | s Asr | n Phe | e Asn | Met |
| 111 | | | | 180 | | | | | 185 | | | | | 190 | | |
| | Thr | Lys | _ | _ | Ala | Arg | ser Ser | | | ı Thr | Gly | Lys | | | r His | Thr |
| 113 | | _ | 195 | | | 1 | _ | 200 | | _, | _ | _ | 205 | | ~-3 | _ |
| | Ala | | | Val | Ile | | | _ | | | | | | ı Ala | a Giu | Lys |
| 115 | Clv | 210 | | Trans | Taro | | 215 | | | പ്പ | | | • | . Туг | ^ T.37C | Glu |
| • | 225 | | vai | ııp | , пув | 230 | | ı val | r ver | ı Gıy | 235 | | | JIYI | L Lya | 240 |
| | | | Val | His | Val | | | ^ Arc | ı Cvs | s Glr | | | Thi | r Val | l Glu | Thr |
| 119 | 410 | 501 | 70.2 | 1110 | 245 | | 7 - | | , 0,1 | 250 | _ | | | _ | 255 | |
| | Val | Arg | Glu | Leu | Thr | Glu | Phe | e Ala | a Lys | s Ser | : Ile | Pro | Sei | r Phe | e Ser | Ser |
| 121 | | | | 260 | | | | | 265 | | | | | 270 | | |
| 122 | Leu | Phe | Leu | Asn | Asp | Glr | val | . Thi | : Lei | ı Lev | ı Lys | ту1 | Gly | y Val | l His | Glu |
| 123 | | | 275 | | | | _ | 280 | | | | | 285 | | | |
| | | | | Ala | Met | Leu | | | : Ile | e Val | . Asr | | | o GIZ | , Leu | Leu |
| 125 | | 290 | | a 1 | | . al- | 295 | | mb. | . 7 | . (1) | 300 | | 2 7 ma | - 00- | |
| | 305 | | ASII | СТУ | sei | 310 | | , val | 1111 | Arg | 315 | | s re | τ Ατζ | y ser | Leu 320 |
| | | | Pro | Phe | Ser | | | • Tle | G]ı | ı Pro | Ī | | G]ı | ı Phe | e Ala | Val |
| 129 | 9 | פינם | | 1110 | 325 | _ | | , | , 010 | 330 | · | , , , , , , | , , , , , , , , , , , , , , , , , , , | | 335 | |
| | Lys | Phe | Asn | Ala | Leu | Glu | Lei | ı Asp | Ası | Ser | : Asp | Let | ı Ala | a Lei | ı Phe | lle |
| 131 | _ | | | 340 | | | | | 345 | 5 | | | | 350 |) | |
| 132 | Ala | Ala | Ile | Ile | Leu | Cys | Gly | / Asp | Arg | g Pro | Gly | / Lei | ı Met | Asr | ı Val | Pro |
| 133 | 4 | | 355 | | | | | 360 | | | | | 365 | | _ | _ |
| | Arg | | | Ala | Ile | Glr | _ | | c Ile | e Lev | ı Arç | =" | | ı Glı | ı Phe | His |
| 135 | _ | 370 | | _ | 1 | _ | 375 | | ~ 7 | _ | _ | 380 | | | | T |
| | | GIn | Ala | Asn | His | | _ |) Ala | a GII | ı Tyr | | | Pro | о гла | з ьеч | Leu |
| | 385 | Tara | Mot | - רא | 7.00 | 390 | | . al. | . T.O. | , 17al | 395 | | , Uic | ¬ 7\] a | a Gla | 400 Mot |
| 138 | GIII | ьys | Met | ытg | 405 | | HIG | , GTI | ı ne | 1 vai 410 | | , GIL | 'UT? | > WTC | 415 | Met |
| | Met | Gln | Δτα | Tle | | | : ሞክነ | - Gli | ı Thi | | | · Sei | r Tæi | ı His | | Leu |
| 141 | | O T 11 | **** | 420 | _ | تا برسد | | . 010 | 425 | | | | | 430 | | |
| | Leu | Gln | Glu | _ | | Lvs | Asr | Met | | | | | | | | |
| 143 | | | 435 | | <u>.</u> – | <u>.</u> | C | 440 | _ | | | | | | | |
| | <21 | 0> S | EQ I | | : 3 | | | | • | | | | | | | |
| | | | | | | | | | | | | | | | | |

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/594,118

DATE: 10/11/2006
TIME: 15:22:10

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\10112006\J594118.raw

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| | 147 | <213> ORGANISM: artificial sequence | |
| W> | 148 | <220> FEATURE: | |
| | 149 | <223> OTHER INFORMATION: forward primer | |
| W> | 150 | <400> SEQUENCE: 3 | 10 |
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| | | <210> SEQ ID NO: 4 | |
| | 153 | <211> LENGTH: 20 | |
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| | 155 | <213> ORGANISM: artificial sequence | |
| W> | | <220> FEATURE: | |
| | | <223> OTHER INFORMATION: reverse primer | |
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| | | <210> SEQ ID NO: 5 | |
| | | <211> LENGTH: 24 | |
| | | <212> TYPE: DNA | |
| | | <213> ORGANISM: artificial sequence | |
| W> | | <220> FEATURE: | |
| | | <223> OTHER INFORMATION: probe | |
| W> | | <400> SEQUENCE: 5 | |
| W> | | ctggcactgg gcatgtcaca caac | 24 |
| | 107 | CCSSCGCSS SCGCGCGCGCGCGCGCGCGCGCGCGCGCGC | • |

RAW SEQUENCE LISTING ERROR SUMMARY PATENT APPLICATION: US/10/594,118

DATE: 10/11/2006 TIME: 15:22:11

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\10112006\J594118.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 2966,2967,2968,2969,2970,2971,2972

VERIFICATION SUMMARY

DATE: 10/11/2006

PATENT APPLICATION: US/10/594,118

TIME: 15:22:11

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\10112006\J594118.raw

L:8 M:283 W: Missing Blank Line separator, <130> field identifier L:10 M:270 C: Current Application Number differs, Replaced Current Application No L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:18 M:283 W: Missing Blank Line separator, <210> field identifier L:22 M:283 W: Missing Blank Line separator, <220> field identifier L:26 M:283 W: Missing Blank Line separator, <400> field identifier L:76 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:2940 L:87 M:283 W: Missing Blank Line separator, <400> field identifier L:148 M:283 W: Missing Blank Line separator, <220> field identifier L:150 M:283 W: Missing Blank Line separator, <400> field identifier L:156 M:283 W: Missing Blank Line separator, <220> field identifier L:158 M:283 W: Missing Blank Line separator, <400> field identifier L:164 M:283 W: Missing Blank Line separator, <220> field identifier L:166 M:283 W: Missing Blank Line separator, <400> field identifier